Air Conditioning, Heating and Ventilating Index to Feature Articles—1962

In this index, grouped by broad subject matter and by author, only feature articles are included excepting that Reference Data Sheets and Detail Sheets are also listed. The abbreviation *Ref. Sec.* indicates Reference Section.

This Index is *not* a list of articles available in reprint form. As a matter of fact, virtually none is available.

INDEX BY SUBJECT

AIR CONDITIONING AND REFRIGERATION

A Classification and Analysis of Air Conditioning Distribution Systems, A. L. Jaros, Jr., April, 79-90.
Air Conditioning, at Garment Plant Provides Increased Production Efficiency, Oct., 93.
Air Conditioning Found Beneficial to Pig Breeding and Raising, Mar., 124.
Air Conditioning Hazardous Industrial Areas, A. J. Battuello and J. W. Maxey, Aug., 47-49.
An Approach to Noise Control, Oct., 82-84.
Apartment Project Generates Own Electricity; Bleed Steam Produces Hot and Chilled Water, April, 95-97.
ARI: Organization and Certified Ratings, Oct., 87-88.
Balancing with Plug Valves, H. Gottwald, Feb., 56-59.
Classification of Unitary Air Conditioner Systems, Oct., 57-65.
Controls for Unitary Systems, Oct., 72-74.
Controlling Condensing Temperature, J. R. Harnish, Part 1, May, 78-81; Part 2—June, 72-77.
For 400 Tons and Up—Consider Multiple Chilling Units, R. A. Dorwart, Feb., 60-64.
Gas-Powered Air Conditioning, Air Conditioning Committee of American Gas Association, Mar., GC-1—GC-20.
Glass Types and Solar Shading, A. L. Jaros, Jr., April, 52-68.
Harnessing a Hurricane in a Beehive on Stilts, Jan., 103-104.
Heat Outside Air?, T. T. Porembski, Dec., 79-80.
Hotel Cools Large Meeting Room and Improves Appearance Too, Oct., 92.
How to Design Thermoelectric Heating and Cooling, Dr. S. Shapiro, Feb., 52-55.
How to Select a Unitary Air Conditioner, Oct., 78-81.
Individual Roof Top Units Provide Year-Round Apartment Conditioning, Oct., 94.
New Data on Pig's Environment, Aug., 58.
New England Clothing Manufacturer Solves Absentee Problem, Boosts Production, Oct., 95.
Open House at Herrick Labs, June, 92.
Positive Pre-Conditioned Makeup Air System Serves Labs of New Chemical Research Unit, May, 93-96.
Prestige Headquarters Air Conditioned by Self-Contained Multizone Units, Oct., 96.
Program Will Test Effect of Air Conditioning on Milk and Butterfat Production, June, 102.
Refrigerant Gas is Primary Heat Source for Retail Center's Heat Pump System, Sept., 101.
Rotary Heat Exchangers, E. J. Speca, June, 68-71.
Shopping Center Air Conditioning Tailored to Tennants' Size and Needs, Oct., 93.
Six Roof-Top Packaged Units Serve New Bowling Alley, Oct., 94-95.
Specification and Design Seminar, M. Ramsey, **Non-Freeze Design for Coils-1,** Jan., 99-100;—2, Feb., 85-87; **Packaged Air Conditioner Problems,** Mar., 121-123; **When Is a Receiver Really Needed?,** May, 82-84; **Better Venting with Fewer Vents,** June, 97-99; **Flagging the Fluid Speed Drivers,** July, 71-74; **Better Piping with Smaller Pipe,** Aug., 73-75; **One-Stage, Two-Stage, When?,** Sept., 98-100; **Between the Stages—Intercooling,** Nov., 98-100; **When We Go Cascade,** Dec. 81-82.
Summer Design Sol-Air Temperatures for Eight U. S. Cities, H. T. Mei, July, 76.
Techniques for Single and Multiple Zones, Oct., 75-77.
The Case for Revolving Doors, Aug., 50.
The Cloisters—Art Treasures Guarded Against Smoke Damage, July, 90-91.
The Unitary Approach: Roof-Top Units Provide Bowling Alley With Zoned Heating and Cooling, N. Feder, Oct., 89-91.
Unitary Conditioners Found Comfort Combination For Mosler Safe Building, Oct., 96.
Variation on a Theme: Bank Vault Air Conditioning, Jan., 101-102.
Where to Install the Unitary Air Conditioner, Oct., 66-71.

AIR DISTRIBUTION

A Classification and Analysis of Air Conditioning Distribution Systems, A. L. Jaros, Jr., April, 79-90.
Controlling Noise in High-Velocity Air Distribution Systems, J. W. Spradling, Nov., 55-60.
Design of Branch Entries, C. H. R. Hook, Jan., 60-63.
Friction Loss in Flexible Air Duct, W. E. Rejeski and B. Hermanson, July, 85-89.
Inlets and Outlets, W. E. Tracy, Part 4—**How Outlet Elbows Affect Performance,** Jan., 73-74; Part 5—**Avoiding Abrupt Duct Changes,** Feb., 69-70.
Special T-Brace and A-Frames Speed Up Insulation of 18,000-Foot Distribution System, Aug., 76-77.

ANIMAL QUARTERS

Air Conditioning Found Beneficial to Pig Breeding and Raising, Mar., 124.
New Data on Pig's Environment, Aug., 58.
Program Will Test Effect of Air Conditioning on Milk and Butterfat Production, June, 102.

ART MUSEUMS

The Cloisters—Art Treasures Guarded Against Smoke Damage, July, 90-91.

BOILER PLANTS

Laying Out Mechanical Equipment Rooms, C. J. Allen, Dec., 44-47.
Selecting Equipment for Industrial Power Plants, R. M. Doering and F. L. Einberger, Dec., 48-51.

BOWLING ALLEYS

Six Roof-Top Packaged Units Serve New Bowling Alley, Oct., 94-95.
The Unitary Approach: Roof-Top Units Provide Bowling Alley With Zoned Heating and Cooling, N. Feder, Oct., 89-91.

CONTROLS

Control Centers (Ref. Sec.), J. E. Haines, July, 61-70.
Controlling Condensing Temperature, J. R. Harnish, Part 1, May, 78-81; Part 2—June, 72-77.
Controls for Unitary Systems, Oct., 72-74.
New Trend in Pneumatic Systems—Plastic Tubing for Control Air Piping, D. W. Schmidt and W. C. Sundberg, Aug., 53-54.
Selecting Boiler Plant Controls (Ref. Sec.), B. L. Sturdevant, Nov., 71-84.
Temperature Control Applications (Detail Sheet), Nov., 87-88.

DATA SHEETS

Adiabatic Compression or Expansion of Air; Water Temperature Rise in Pumps (Data Sheet), Nov., 85-86.
Guides for Air Pollution Prevention (Data Sheet), Oct., 97-98.
How to Use the Sol-Air Temperature Tables (Data Sheet), July, 77-82.
Pressure Drop of Air in Pipes; Nomograph for Pressure Drop of Air in Pipes (Data Sheet), May, 85-86.
Quick-Sizing Chart for Water Supply—Brass Pipe (Data Sheet), Jan., 91-92.
Quick-Sizing Chart for Water Supply—Steel Pipe (Data Sheet), Feb., 81-82.
Summer Outdoor Design Conditions (Data Sheet), June, 93-94.
Summer Outdoor Design Conditions (Data Sheet), July, 83-84.
Summer Outdoor Design Conditions; Canadian Summer Design Temperatures (Data Sheet), Aug., 69-70.
Threshold Limit Values of Air Contaminants (Data Sheet), Mar., 117-118.
Threshold Limit Values of Air Contaminants (Data Sheet), April, 101-102.

DEGREE-DAYS

Degree Days for 146 Cities: For Nov. 1961, Jan. 1962 134; Dec. 1961, Feb. 1962, 126; Jan. 1962, Mar. 1962, 156; Feb. 1962, April, 1962, 144; Mar. 1962, May, 1962, 136; April, 1962, June, 1962, 132; May, 1962, July, 1962, 116; June, 1962, Aug. 1962, 108; Aug. 1962, Oct. 1962, 132; Sept. 1962, Nov. 1962, 128; Oct. 1962, Dec. 1962, 116.

DETAIL SHEETS

Compressed Air (Detail Sheet), Oct., 99-100.
Carbon Dioxide Fire Extinguishing Systems (Detail Sheet), Dec., 91-94.
Drafting Symbols for Steam Heating Layout (Detail Sheet), Sept., 89-92.
Hanger for Ducts; Two-Piece Streamliner (Detail Sheet), June, 95-96.
Hangers for Ducts (Detail Sheet), Jan., 93-94.
Hangers for Ducts (Detail Sheet), Feb., 83-84.
Hangers for Ducts—To Steel Beams and Wood Joints; To Concrete Beams and Slabs (Detail Sheet), May, 87-88.
Industrial Ventilation (Detail Sheet), Aug., 71-72.
Prison Plumbing (Detail Sheet), Mar., 119-120.
Prison Plumbing (Detail Sheet), April, 103-104.
Temperature Control Applications (Detail Sheet), Nov., 87-88.
The Details of Engineering, B. L. Sturdevant and W. C. Battey, Part 1—July, 51-54; Part 2—Aug., 51-52;

DUCTWORK

Design of Branch Entries, C. H. R. Hook, Jan., 60-63.
Friction Loss in Flexible Air Duct, W. E. Rejeski and B. Hermanson, July, 85-89.
Hangers for Ducts (Detail Sheet), Jan., 93-94.
Hangers for Ducts (Detail Sheet), Feb., 83-84.
Hangers for Ducts—To Steel Beams and Wood Joints; To Concrete Beams and Slabs (Detail Sheet), May, 87-88.
Hanger for Ducts; Two-Piece Streamliner (Detail Sheet), June, 95-96.
How to Select the Right Centrifugal Pressure Blower, J. R. Kassel, Feb., 65-68.
Inlets and Outlets, W. E. Tracy, Part 4—**How Outlet Elbows Affect Performance,** Jan., 73-74; Part 5—**Avoiding Abrupt Duct Changes,** Feb., 69-70.
Pressure Drop of Air in Pipes; Nomograph for Pressure Drop of Air in Pipes (Data Sheet), May, 85-86.

ELECTRIC HEATING

How to Design Thermoelectric Heating and Cooling, S. Shapiro, Feb., 52-55.

ELEVATORS

Design Considerations for Vertical Transportation, H. D. Unwin, Dec., 52-54; **Industrial Waste Treatment,** Dec., 55.

FANS AND BLOWERS

How to Select the Right Centrifugal Pressure Blower, J. R. Kassel, Feb., 65-68.
Rating the Sound from Fans, C. J. Trickler, April, 93-94.

FIRE PROTECTION

Carbon Dioxide Fire Extinguishing Systems (Detail Sheets), Dec., 91-94.
Engineering for Fire Protection, T. E. Burke—Part 1, **Design Criteria for Fire Prevention;** Part 2, **Space Age Fire Protection,** Dec., 60-66.

GAS HEATING AND COOLING

Gas Heating, C. G. Segeler, Mar., GC-33—GC-53.
Gas-Powered Air Conditioning, Air Conditioning Committee of American Gas Association, Mar., GC-1—GC-20.
Study Finds Absorption Less Costly than Heat Pumps, May, 97-98.
The ABC's . . . and T's . . . of Burning Gas Efficiently, S. N Craig, May, 75-77.

HEAT TRANSFER

Convective Inside Film Resistances for Walls, Floor, and Ceiling, F. W. Hutchinson and M. O. Cotter, Nov., 65-70.
Design Outside Film Resistances for Cities in the United States (Ref Sec.), F. W. Hutchinson and M. O. Cotter, Aug., 59-68.
For 400 Tons and Up—Consider Multiple Chilling Units, R. A. Dorwart, Feb., 60-64.
Glass Types and Solar Shading, A. L. Jaros, Jr., April, 52-68.
How to Use the Sol-Air Temperature Tables (Data Sheet), July, 77-82.
Rotary Heat Exchangers, E. J. Speca, June, 68-71.
Summer Outdoor Design Conditions (Data Sheet), July, 83-84.
Summer Outdoor Design Conditions (Data Sheet, June, 93-84.
Summer Outdoor Design Conditions; Canadian Summer Design Temperatures (Data Sheet), Aug., 69-70.
Summer Design Sol-Air Temperatures for Eight U. S. Cities, H. T. Mei, July, 76.
Thermal Effects of External Corners, F. W. Hutchinson and M. O. Cotter, May, 58-64.
Thermal Effects of Exterior Integral Columns, F. W. Hutchinson and M. O. Cotter, July, 55-60.

HOSPITALS

The New Look at the Hospital Laundry, L. Guss, Nov., 90-94.

HOT WATER HEATING

Cooling-Heating with Primary-Secondary Pumping (Ref. Sec.), H. B. Swygert, Feb., 72-80.
Gas Heating, C. G. Segeler, Mar., GC-33—GC-53.
How to Automate a High Temperature Water System for Safety, Simplicity and Savings, W. L. Sculthorpe, April, 69-72.
New Insights from Experiences, With HTW Installations, O. S. Lieberg, Part 1—Nov., 61-64;
Nitrogen Pressurizing for High Temperature Water Systems, O. W. Lieberg, Aug., 43-46.
Panel Heating in Polar Buildings, J. M. Stephenson, June, 61-64.

HOUSING

Hotel Cools Large Meeting Room and Improves Appearance Too, Oct., 92.
Housing the Elderly, F. Meyer, Jan., 49-54.
Individual Roof Top Units Provide Year-Round Apartment Conditioning, Oct., 94.
New England Clothing Manufacturer Solves Absentee Problem, Boosts Production, Oct., 95.

INDUSTRIAL PLANTS

Air Conditioning at Garment Plant Provides Increased Production Efficiency, Oct., 93.
Air Conditioning Hazardous Industrial Areas, A. J. Battuello and J. W. Maxey, Aug., 47-49.
Applying Warm Air Systems to Commercial and Industrial Buildings, C Enerson, Jan., 68-72.
Film Processor Develops Savings With Gas-Fueled Air Conditioners, Feb., 88-89.
Positive Pre-Conditioned Makeup Air System Serves Labs of New Chemical Research Unit, May, 93-96.

INSULATION

Minimum Insulation to Prevent Condensation, Aug., 55-57.
Special T-Brace and A-Frames Speed Up Insulation of 18,000-Foot Distribution System, Aug., 76-77.

OFFICE AND BANK BUILDINGS

Harnessing a Hurricane in a Beehive on Stilts, Jan., 103-104.
Prestige Headquarters Air Conditioned by Self-Contained Multizone Units, Oct., 96.
The Case for Revolving Doors, Aug., 50.
Unitary Conditioners Found Comfort Combination For Mosler Safe Building, Oct., 96.
Variation on a Theme: Bank Vault Air Conditioning, Jan., 101-102.

ORGANIZATION

An Engineers' Organization, Apr., 90; **How the ME's Fit into AKA,** G. S. Whittaker, Dec., 57-59.

PIPING AND PLUMBING

Adiabatic Compression or Expansion of Air; Water Temperature Rise in Pumps (Data Sheet), Nov., 85-86.
A Guide to Plumbing Design in Overseas Projects, R. W. Schulze, April, 73-78.
Annual "Refresher Course" Sessions Keep Sanitary Engineers Up-to-Date, Nov., 95-96.
Balancing with Plug Valves, H. Gottwald, Feb., 56-59.
Boosting Water Pressure, B. Janofsky, June, 78-80.
Circulating Systems Serve Paint Spray Booths, J. Nachbar, Dec., 68-74.
Clean Water for Swimming Pools, June, 65-67.
Compressed Air (Detail Sheet), Oct., 99-100.
Design Considerations for Compressed Air Systems, S. A. Littmann, May, 53-57.
Engineering for Fire Protection, T. E. Burke—Part 1, **Design Criteria for Fire Prevention; Part 2, Space Age Fire Protection,** Dec., 60-66.
Fluid Drives Provide Pumping Economies, K. A. Pettit, Dec., 75-77.
Gas Flow Tables for Pressures 1-20 psig (Ref. Sec.), J. Nachbar, Jan., 75-90.
Housing the Elderly, F. Meyer, Jan., 49-54.
How to Automate a High Temperature Water System for Safety, Simplicity and Savings, W. L. Sculthorpe, April, 69-72.
Industrial Waste Treatment, H. D. Unwin, Dec., 55.
Minimum Insulation to Prevent Condensation, Aug., 55-57.
Modern Steam Heating Design, S. S. Lyon, Sept., 57-88.
New Trend in Pneumatic Systems—Plastic Tubing for Control Air Piping, D. W. Schmidt and W. C. Sundberg, Aug., 53-54.
New Insights from Experiences With HTW Installations, O. S. Lieberg, Part 1—Nov., 61-64;
Nitrogen Pressurizing for High Temperature Water Systems, O. W. Lieberg, Aug., 43-46.
Plumbing in Care Institutions (Ref. Sec.), O. L. Gepford, May, 65-74.
Prison Plumbing (Detail Sheet), Mar., 119-120.
Prison Plumbing (Detail Sheet), April, 103-104.
Quick-Sizing Chart for Water Supply—Steel Pipe (Data Sheet), Feb., 81-82.
Quick-Sizing Chart for Water Supply—Brass Pipe (Data Sheet), Jan., 91-92.
Roof Drainage Design Data Available; Hot Water Consumption Data Coming, Dec., 77-78.
Steam Provides New Economies for Slab-on-Grade Construction, S. S. Lyon, Jan., 64-67.
The Details of Engineering, B. L. Sturdevant and W. C. Battey, Part 1—July, 51-54; Part 2—Aug., 51-52;
The New Look at the Hospital Laundry, L. Guss, Nov., 90-94.

POLAR BUILDINGS

Panel Heating in Polar Buildings, J. M. Stephenson, June, 61-64.

PUMPS

Fluid Drives Provide Pumping Economies, K. A. Pettit, Dec., 75-77.
Variable-Speed House Pumps, J. E McGinness, Jr., Sept., 93-97.

REFERENCE SECTIONS

Control Centers (Ref. Sec.), J. E. Haines, July, 61-70.
Cooling-Heating with Primary-Secondary Pumping (Ref. Sec.), H. B. Swygert, Feb., 72-80.
Design Outside Film Resistances for Cities in the United States (Ref Sec.), F. W. Hutchinson and M. O. Cotter, Aug., 59-68
Gas Flow Tables for Pressures 1-20 psig (Ref. Sec.), J. Nachbar, Jan., 75-90.
Plumbing in Care Institutions (Ref. Sec.), O. L. Gepford, May, 65-74.
Selecting Boiler Plant Controls (Ref. Sec.), B. L. Sturdevant, Nov., 71-84
Ventilation for Survival Shelters (Ref. Sec.), W. H. Holt, June, 81-91.

SCHOOLS

Central Steam Plant Serves Seminary's Expansion Requirements, H. B. Swygert, June, 100-101.

SERVICE WATER

Boosting Water Pressure, B. Janofsky, June, 78-80.
Roof Drainage Design Data Available; Hot Water Consumption Data Coming, Dec., 77-78.
Variable-Speed House Pumps, J. E. McGinness, Jr., Sept., 93-97.

SOUND CONTROL

An Approach to Noise Control, Oct, 82-84.
Controlling Noise in High-Velocity Air Distribution Systems, J. W. Spradling, Nov., 55-60.
Rating the Sound from Fans, C. J. Trickler, April, 93-94.

SPECIFICATION AND DESIGN SEMINAR

Specification and Design Seminar, M. Ramsey, **Non-Freeze Design for Coils-1,** Jan., 99-100;—2, Feb., 85-87; **Packaged Air Conditioner Problems,** Mar., 121-123; **When Is a Receiver Really Needed?,** May, 82-84; **Better Venting with Fewer Vents,** June, 97-99; **Flagging the Fluid Speed Drivers,** July, 71-74; **Better Piping with Smaller Pipe,** Aug., 73-75; **One-Stage, Two-Stage, When?,** Sept., 98-100; **Between the Stages — Intercooling,** Nov., 98-100; **When We Go Cascade,** Dec., 81-82.

STEAM HEATING

Apartment Project Generates Own Electricity; Bleed Steam Produces Hot and Chilled Water, April, 95-97.
Central Steam Plant Serves Seminary's Expansion Requirements, H. B. Swygert, June, 100-101.
Drafting Symbols for Steam Heating Layouts (Detail Sheets), Sept., 89-92.
Laying Out Mechanical Equipment Rooms, C. J. Allen, Dec., 44-47.
Modern Steam Heating Design, S. S. Lyon, Sept., 57-88.
Selecting Equipment for Industrial Power Plants, R. M. Doering and F. L. Einberger, Dec., 48-51
Steam Provides New Economies for Slab-on-Grade Construction, S S. Lyon, Jan., 64-67.

STORES

Refrigerant Gas is Primary Heat Source for Retail Center's Heat Pump System, Sept., 101.
Shopping Center Air Conditioning Tailored to Tenants' Size and Needs, Oct., 93.

VENTILATION

Guides for Air Pollution Prevention (Data Sheet), Oct., 97-98.
Industrial Ventilation (Detail Sheet), Aug., 71-72.
Threshold Limit Values of Air Contaminants, (Data Sheet), Mar., 117-118; April, 101-102.
Ventilation for Survival Shelters (Ref. Sec.), W. H. Holt, June, 81-91.

WARM AIR HEATING

Applying Warm Air Systems to Commercial and Industrial Buildings, C. Enerson, Jan., 68-72.

WATER TREATMENT

Clean Water for Swimming Pools, June, 65-67.

INDEX BY AUTHORS

Allen, C. J., Associate, Assistant Chief Mechanical Engineer, Albert Kahn Associated Architects & Engineers, Inc.—Laying Out Mechanical Equipment Rooms, Dec., 44-47.

Amann, W. L., Manager, Technical Services, Houston Natural Gas Corp. (member Air Conditioning Committee of American Gas Association)—Gas-Powered Air Conditioning, Mar., GC-1—GC-20.

Battey, W. C., Chief Draftsman, Design Group and **Sturdevant, B. L.,** Head of Design Group, Stanley Engineering Co.—The Details of Engineering, Part 1—July, 51-54; Part 2—Aug., 51-52;

Battuello, A. J., and **Maxey, J. W.,** Engineering Staff, Ford Motor Co.—Air Conditioning Hazardous Industrial Areas, Aug., 47-49.

Burke, T. E., Associate and Staff Mechanical Engineer, Fire Protection, Albert Kahn Associated Architects & Engineers, Inc.—Engineering for Fire Protection: Part 1—Design Criteria for Fire Prevention: Part 2—Space Age Fire Protection, Dec., 60-67.

Cotter, M. O., Engineering Consultant, and **Hutchinson, F. W.,** Professor of Mechanical Engineering, University of California, and Visiting Professor (1959-1961), University of Gadjah Mada, Jogjakarta, Indonesia—Thermal Effects of External Corners, May, 58-64; Thermal Effects of Exterior Integral Columns, July, 55-60; Design Outside Film Resistances for Cities in the United States (Ref. Sec.), Aug., 59-68; Inside Film Resistances for Walls, Floor, and Ceiling, Nov., 65-70.

Craig, S. N., Chief Engineer, Orr & Sembower, Inc.—The ABC's . . and T's . . of Burning Gas Efficiently, May, 75-77

Doering, R. M., Associate, Chief Engineer—Power Plant Div., and **Einberger, F. L.,** Engineer—Power Plant Div., Albert Kahn Associated Architects & Engineers, Inc.—Selecting Equipment for Industrial Power Plants, Dec., 48-51.

Dorwart, R. A., Manager—Application Engineering Dept., York Div., Borg-Warner Corp.—For 400 Tons and Up—Consider Multiple Chilling Units, Feb., 60-64.

Einberger, F. L., Engineer—Power Plant Div., and **Doering, R. M.,** Associate, Chief Engineer—Power Plant Div., Albert Kahn Associated Architects & Engineers, Inc.—Selecting Equipment for Industrial Power Plants, Dec., 48-51.

Enerson, C., Commercial Application Engineer, Lennox Industries Inc.—Applying Warm Air Systems to Commercial and Industrial Buildings, Jan., 68-72.

Feder, N., Consulting Engineer—The Unitary Approach: Roof-Top Units Provide Bowling Alley with Zoned Heating and Cooling, Oct., 89-91.

Gepford, O. L., Plumbing Inspection Bureau, Dept. of Buildings and Safety Engineering, City of Detroit—Plumbing in Care Institutions (Ref. Sec.), May, 65-74.

Gottwald, H. Product Manager—Valve Products, Rockwell Mfg. Co.—Balancing with Plug Valves, Feb., 56-59.

Guss, L., Design Engineer, Smith, Hinchman & Grylls Associates, Inc.—The New Look at the Hospital Laundry, Nov., 90-94.

Haines, J. E., Vice-President, Minneapolis-Honeywell Regulator Co.—Control Centers (Ref. Sec.), July, 61-70.

Hall, N. K., Manager, Refrigeration & Air Conditioning, The Ready-Power Co. (member Air Conditioning Committee of American Gas Association)—Gas-Powered Air Conditioning, Mar., GC-1—GC-20.

Harnish, J. R., Factory Assembled Equipment, York Div., Borg-Warner Corp.—Controlling Condensing Temperature, Part 1—May, 78-81; Part 2—June, 72-77.

Hermanson, B., Test Engineer Air Duct Div. and **Rejeski, W. E.,** Director of Research and Development, The Wiremold Co.—Friction Loss in Flexible Air Duct, July, 85-89.

Holt, W. H., Manager, New Product Development, Buffalo Forge Co.—Ventilation for Survival Shelters (Ref. Sec.), June, 81-91.

Hook, Cecil H. R.—Design of Branch Entries, Jan., 60-63.

Hutchinson, F. W., Professor of Mechanical Engineering, University of California, and Visiting Professor (1959-1961), University of Gadjah Mada, Jogjakarta, Indonesia, and **Cotter, M. O.,** Engineering Consultant—Thermal Effects of External Corners, May, 58-64; Thermal Effects of Exterior Integral Columns, July, 55-60; Design Outside Film Resistances for Cities in the United States (Ref. Sec.), Aug., 59-68; Inside Film Resistances for Walls, Floor, and Ceiling, Nov., 65-70.

Janofsky, B., Project Engineer, Voorhees Walker Smith Smith & Haines—Boosting Water Pressure, June, 78-80.

Jaros, A. L., Jr., Jaros, Baum & Bolles—Glass-Types and Solar Shading, April, 52-68; Classification of Air Conditioning Distribution Systems, April, 79-90.

Kassel, J. R., The New York Blower Co.—How to Select the Right Centrifugal Pressure Blower, Feb., 65-68.

Lieberg, O. S., Consulting Engineer—Nitrogen Pressurizing for High Temperature Water Systems, Aug., 43-46; New Insights from Experiences With HTW Installations, Nov., 61-64.

Littmann, S. A., Chief Mechanical Engineer, Giffels & Rossetti, Inc.—Design Considerations for Compressed Air Systems, May, 53-57.

Lyon, S. S., Sales Manager, Building Equipment Division, Nash Engineering Co.—Steam Provides New Economies for Slab-on-Grade Construction, Jan., 64-67; Modern Steam Heating Design, Sept., 57-88.

McGinness, J. E., Jr., Senior Engineer, Bovay Engineers, Inc.—Variable-Speed House Pumps, Sept., 93-97.

Maxey, J. W., and **Battuello, A. J.,** Engineering Staff, Ford Motor Co.—Air Conditioning Hazardous Industrial Areas, Aug., 47-49.

Mei, H. T., Associate Professor of Mechanical Engineering, Lamar State College of Technology—Summer Design Sol-Air Temperatures for Eight U. S. Cities, July, 76.

Meyer, F., Professional Engineer—Housing The Elderly, Jan., 49-54.

Moore, J. F., Chief Engineer, Lone Star Gas Co. (member Air Conditioning Committee of American Gas Association)—Gas-Powered Air Conditioning, Mar., GC-1—GC-20.

Nachbar, J., Associate, Albert Kahn Associated Architects and Engineers, Inc.—Gas Flow Tables for Pressures 1-20 psig (Ref. Sec.), Jan., 75-90; Circulating Systems Serve Paint Spray Booths, Dec., 68-74.

Pettit, K. A., Consulting Engineer, Pettit & Pettit—Fluid Drives Provide Pumping Economies, Dec., 75-77.

Porembski, T. T., Mechanical Engineer, Knolls Atomic Power Laboratory—Heat Outside Air?, Dec., 79-80.

Ramsey, M., Consulting Engineer, Air Conditioning and Refrigeration Div., Worthington Corp. — Specification and Design Seminar: Non-Freeze Design for Coils—1, Jan., 99-100; —2, Feb., 85-87; Packaged Air Conditioner Problems, Mar., 121-123; When Is a Receiver Really Needed?, May, 82-84; Better Venting with Fewer Vents, June, 97-99; Flagging the Fluid Speed Drivers, July, 71-74; Better Piping with Smaller Pipe, Aug., 73-75; One-Stage, Two-Stage, When?, Sept., 98-100; Between the Stages—Intercooling, Nov., 98-100; When We Go Cascade, Dec., 81-82.

Schmidt, D. W., Manager of Installations and **Sundberg, W. C.,** Systems Application Engineer, Minneapolis-Honeywell Commercial Div.—New Trend in Pneumatic Systems—Plastic Tubing for Control Air Piping, Aug., 53-54.

Schulze, R. W., Associate, Jaros, Baum & Bolles—A Guide to Plumbing Design in Overseas Projects, April, 73-78.

Sculthorpe, W. L., Project Manager, Jaros, Baum & Bolles—How to Automate a High Temperature Water System for Safety, Simplicity and Savings, April, 69-72.

Segeler, C. G., Director, Utilization Bureau, American Gas Association—Gas Heating, Mar. GC-33—GC-53.

Shapiro, Dr. S., President, Materials Electronic Products Corp.—How to Design Thermoelectric Heating and Cooling, Feb., 52-55.

Speca, E. J., Manager of Special Applications, The Air Preheater Co.—Rotary Heat Exchangers, June, 68-71.

Spradling, J. W., Senior Product Engineer, Carnes Corp.—Controlling Noise in High-Velocity Air Distribution Systems, Nov., 55-60.

Stephenson, J. M., Senior Project Engineer, Environmental Control Div., U. S. Naval Civil Engineering Laboratory—Panel Heating in Polar Buildings . . . with —65 deg Outside, June, 61-64.

Sturdevant, B. L., Head of Design Group and **Battey, W. C.,** Chief Draftsman, Design Group, Stanley Engineering Co.—The Details of Engineering, Part 1—July, 51-54; Part 2—Aug., 51-52; Selecting Boiler Plant Controls (Ref. Sec.), Nov., 71-84.

Sundberg, W. C., Systems Application Engineer and **Schmidt, D. W.,** Manager of Installations, Minneapolis-Honeywell Commercial Div.—New Trend in Pneumatic Systems—Plastic Tubing for Control Air Piping, Aug., 53-54.

Swygert, H. B., Head-Mechanical Section, Lyles, Bissett, Carlisle & Wolff—Cooling-Heating with Primary-Secondary Pumping (Ref. Sec.), Feb., 72-80; Central Steam Plant Serves Seminary's Expansion Requirements, June, 100-101.

Tracy, W. E., Sturtevant Division, Westinghouse Electric Corp.—Inlets and Outlets, Part 4—How Outlet Elbows Affect Performance, Jan., 73-74; Part 5—Avoiding Abrupt Duct Changes, Feb., 69-70.

Trickler, C. J., Chief Engineer, The New York Blower Co.—Rating the Sound from Fans, April, 93-94.

Unwin, H. D., Associate, Staff Mechanical Engineer, Special Services, Albert Kahn Associated Architects & Engineers, Inc. —Industrial Waste Treatment, Dec., 55.

Whittaker, G. S., Vice President and Chief Mechanical Engineer, Albert Kahn Associated Architects & Engineers, Inc.—How the ME's Fit into AKA, Dec., 57-59.

Wood, F. C., Manager—Air Conditioning Sales, York Corp., subsidiary of Borg-Warner Corp. (member Air Conditioning Committee of American Gas Association) —Gas-Powered Air Conditioning, Mar., GC-1—GC-20.

Air Conditioning, Heating and Ventilating
93 Worth St., New York 13, N. Y.